the savvy to game the process. nce the company it is harming may be its competitor in long

distance and other areas

The consumer would be he ultimate loser in this system of rampant gaming Local rates

would have to go up to cover tl lost universal service support If local rates can't be increased,

then the facilities based carrier ould have no incentive to invest in the infrastructure Service

quality would likely deteriorate Potential facilities based competitors would have no incentive to

enter Under this scenario, ther are many losers, including the incumbent LEC, potential

competitors and the consumer)nly the game player wins

Since bidding is a totally unworkable means of funding universal service, it would be

misleading and fruitless to spec late and attempt to respond to the specific questions in this

section

* *

Benchmark Cost Model (BCM)

56   How do the book costs f incumbent local exchange carriers compare with the calculated
      proxy costs of the Bent imark Cost Model (BCM) for the same areas?

Since the Benchmark (st Model was significantly revised. BellSouth will provide an

analysis in its August 9 comme ts

* *　* *

57 Should the BCM be modified to include non-wireline services? If wireless technology
    proves less costly than wireline facilities, should projected costs be capped at the level
    predicted for use of wireless technology?

No Until such time as wireless service provider becomes an "eligible carrier," there is

no need to include wireless technology (except for wireless technology that is available to

incumbent local exchange companies for service in very remote areas).

* *　* * * * * * * * * * * * * * * * * *　* *

58 What are the advantages and disadvantages of using a wire center instead of a Census
    Block Group as the appropriate geographic area in projecting costs?

If actual embedded costs are used to calculate universal service support, then the wire

center is the most appropriate size area for calculating support, because it represents the smallest

area for which embedded costs are available. If, however, a proxy cost model is used, then costs

could be calculated in an even more targeted manner. Either census block groups (as used within

the Benchmark Cost Model) or grid cells (as used in the Cost Proxy Model) are superior to wire

centers for targeting high cost support under a proxy cost methodology.

* *　* *　* *

59 The Maine PUC and several other state commissions proposed inclusion in the BCM of
    the costs of connecting exchanges to the public switched network through the use of
    microwave, trunk, or satellite technologies. Those commenters also proposed the use of
    an additional extra-high-cost variable for remote areas not accessible by road. What is the
    feasibility and the advisability of incorporating these changes into the BCM?

BellSouth has no information regarding the feasibility of incorporating these technologies.

***************************   ***

60.   <u>The National Cable Tele ision Association proposed a number of modifications to the
BCM related to switchir g cost, fill factors, digital loop carrier subscriber equipment,
penetration assumptions deployment of fiber versus copper technology assumptions, and
service area interface co ts. Which, if any, of these changes would be feasible and
advisable to incorporate into the BCM?</u>

In their May 7, 1996 Re ly Comments in this docket, US West fully addressed the

modifications proposed by the ational Cable Television Association and soundly refuted the

proposed changes

None of the NCTA s pr posals should be adopted. Even a summary review of the Ex

Parte presentation given to the oint Board Staff by representatives of ETI and the National Cable

Television Association on May 30, 1996 (Copies of which were filed some three weeks later

(June 20, 1996) with the FCC) eveals ill-conceived notions that call into question the entirety of

these recommendations

For example, ETI reco mends that the fill factors for feeder and distribution cable be

raised to levels of 95% in all at as. It makes this recommendation based on the following

reasoning "single line basic re dential service, thus stable demand, thus high fill factor."

ETI's recommendatior reflects an ignorance of network operations, in particular, the

manner in which copper cable lant is maintained and/or of engineering practices designed to

minimize overall levels of expe ditures in providing basic service. If plant were maintained at an

average fill level of 95%, there would be very few if any spare pairs available for use by

maintenance crews. Thus, wh n a customer's service is impaired (for example, by water intrusion

into the cable), there would be very limited options for getting that customer back into service.

The lack of options would oft n times result in considerable extra expense in getting customers

back into service Thus. when a cable's fill factor exceeds a certain point, maintenance costs go

up exponentially A fill factor o 95% certainly exceeds any reasonable level from a cable

maintenance standpoint In add ion to higher maintenance costs, an average fill factor of 95%

would mean that many custome s who request basic service could not get it when they want it

They would have to wait for ne cable to be installed This would occur due to the very few

spare pairs that on average wou d be available to installation crews

A fill factor of 95% is a so unrealistic in situations where some of the residents own

second homes In these areas. nere will often be low utilization levels caused by residents

disconnecting phone service in heir primary home while they occupy their second homes Cable

fill factors will fluctuate consid rably in these areas

Lastly, the ETI's fill fac or recommendation is at odds with other recommendations it

advocates For example. ETI n tes that residential service should benefit from economies of scale

and scope from business lines While such a recommendation has some merit. it also means that

demand will be less stable. the by resulting in the need for an even lower utilization factor

ETI has not provided a w valid reasons for increasing utilization levels beyond those

specified in the BCM Indeed all they have done is point out the danger in basing universal

service support purely on the sults of a proxy model If the inputs are flawed (such as the 95%

fill factor recommended by ET I), then universal service support will be insufficient (which clearly

violates one of the principles the Telecommunications Act of 1996)

ETI also recommends hat the fixed cost of the switch be totally ignored in the cost

calculation for universal servi e Such a recommendation would shift, in its entirety. the recovery

of this considerable cost. whi n is part of the cost of providing universal service, to other highly

competitive services. Such a recommendation is contrary to the universal service principles set forth in the Telecommunication Act.

Another area where ETI makes an obviously flawed recommendation is in the area of the fiber/copper crossover point. ETI recommends that a crossover point of 27kf be used rather than the 12kf used within the BCM. ETI's recommendation is largely driven by their fatally flawed recommendation to increase the copper cable utilization level to 95%. (Since they increase the utilization of copper cable by a larger relative amount than they increase the utilization level for fiber equipment, it increases the viability of copper cable.) It is also doubtful that ETI properly accounted for the increase in maintenance costs that would arise from greater reliance on copper cable technology.

Hence, it is clear that ETI's recommendations should be disregarded.

*********************** ************************ ******************************

61   Should the support calculated using the Benchmark Cost Model also reflect subscriber income levels, as suggested by the Puerto Rico Telephone Company in its comments?

The proxy cost by area will not be impacted by subscriber income levels. However, as was noted in response to question 3, it may make sense to vary the affordability benchmark rate by state based on the average income level within the state.

************************* **

62   The BCM appears to compare unseparated costs, calculated using a proxy methodology, with a nationwide local benchmark rate. Does use of the BCM suggest that the costs calculated by the model would be recovered only through services included in the benchmark rate? Does the BCM require changes to existing separations and access charge rules? Is the model designed to change as those rules are changed? Does the comparison of model costs with a local rate affordability benchmark create an opportunity for over-recovery from universal service support mechanisms?

The BCM calculates unseparated proxy costs. Once an initial level of support is calculated, each LEC would be required to reduce rates to offset the net amount of support received (See response to question #3 for a prioritization of rate reductions). It is BellSouth's belief that no separations rule changes would be needed to implement a funding mechanism based on the BCM.

The costs calculated by the model would not be recovered solely by the core services. Indeed, the whole purpose of a universal service fund is to keep the rates for the core services at an affordable level, even when the costs of service are high. Thus, recovery of the estimated proxy costs would occur through a combination of the end user rates for the core services and the universal service fund. To the extent a company's actual costs exceed the theoretical proxy costs, then the opportunity for recovery of actual costs would need to be allowed via other rates.

If the new universal service fund is implemented in a revenue neutral manner, then the opportunity for over recovery from universal service support mechanisms is virtually nil. However, if proxy costs are mistakenly used as actual costs, then some companies could actually end up with more support than they need, while other companies receive less support than they require. That is why revenue neutral implementation is so important. Inaccuracy within the proxy

model is rendered moot by implementation of the universal service fund in a revenue neutral manner.

* *

63   Is it feasible and/or advisable to integrate the grid cell structure used in the Cost Proxy Model (CPM) proposed by Pacific Telesis into the BCM for identifying terrain and population in areas where population density is low?

It is BellSouth's understanding that the CPM, while it calculates cost by grid cell, actually looks at terrain on a census block group basis (since that is the lowest level for which terrain data is available).

While the grid cell approach is a reasonable way to account for population in sparsely populated areas, the BCM 2 also incorporates a new and improved way to account for the geographic dispersion of people in very sparsely areas. It only considers the area within 500 feet of roads for purposes of calculating the served area in sparsely populated CBGs. Such an approach addresses a concern raised by BellSouth in earlier comment cycles.

* *

Cost Proxy Model (CPM)

64.   Can the grid cell structure used in the CPM reasonably identify population distribution in sparsely-populated areas?

It is BellSouth's understanding that census blocks (not census block groups) are used to determine where the population resides within a grid cell (or within a sparsely populated area consisting of several grid cells). Census blocks consist of about 10-20 homes on average, and thus the targeting should be quite good on average.

65   Can the CPM be modifi d to identify terrain and soil type by grid cell?

It is BellSouth's unders nding that terrain and soil type by grid cell are actually based on

data by census block group (ty cally, a census block group is larger than a grid cell) While not

perfect. it must be remembered hat the output of the models is only to be used for calculating

federal universal service suppo   Again. if the fund is implemented on a revenue neutral basis, the

model does not need to be 100 accurate (indeed. no proxy model can be 100% accurate; there

will always be some deviation t om reasonable actual costs)

66   Can the CPM be used c n a nationwide basis to estimate the cost of providing basic
        residential service?

If the question is asking about the development of a nationwide average cost of providing

basic residential service BellS uth sees little value in such a calculation However. if the question

is asking about the applicability of the Cost Proxy Model in all parts of the United States,

BellSouth is unaware of any ob stacles to using the model in all areas Of course, the developers

of the model. Pacific Bell and NDETEC would be in the best position to address this question in

detail

67   Using the CPM, what c sts would be calculated by Census Block Group and by wire
        center for serving a rur l, high-cost state (e.g., Arkansas)?

BellSouth is still in the rocess of evaluating the Cost Proxy Model If the data can be

processed, BellSouth will resp nd to this question when it files its comments on August 9, 1996,

regarding the various cost mo els

************************** ***

68   Is the CPM a self-contained model, or does it rely on other models, and if so, to what extent?

It is BellSouth's belief that the CPM is a self contained model. It does require switching cost inputs, however, and those may need to be calculated on a per minute basis outside of the formal CPM for use within the model

************************** ***

SLC/CCLC

69   If a portion of the CCL charge represents a subsidy to support universal service, what is the total amount of the subsidy? Please provide supporting evidence to substantiate such estimates. Supporting evidence should indicate the cost methodology used to estimate the magnitude of the subsidy (e.g., long-run incremental, short-run incremental, fully-distributed)

Based on actual ARMIS data, BellSouth has shown that the entire interstate CCL charge (and the interconnection charge for that matter) is a subsidy to support universal service. This showing was provided to Commission in an ex parte presentation on June 21, 1996.

************************** ***

70   If a portion of the CCL charge represents a contribution to the recovery of loop costs, please identify and discuss alternatives to the CCL charge for recovery of those costs from all interstate telecommunications service providers (e.g., bulk billing, flat rate/per-line charge).

If the Commission adopts a methodology that results in universal service support that is less than the current CCL, then local exchange companies need to have the flexibility to recover the remaining CCL amount in method other than per minute charges Bulk billing and/or flat rate per line charges would be appropriate alternatives for the Commission to implement. Below, BellSouth discusses two alternatives, bulk billing and a per line charge.

1. Bulk Billing

Under this approach, the CCL and RIC charges would be replaced by a non-usage sensitive charge billed to interexchange carriers. The charge would be initially set to produce the same level of revenue that the current CCL and RIC charges produce. Each interexchange carrier would be apportioned a part of the total amount. This apportionment would reflect the interexchange carrier's bulk billed amount. The bulk billed amount would be divided by 12, and billed monthly to the interexchange carrier. The interexchange carriers apportionment could be based on their share of

- Interstate retail revenues.
- presubscribed end user lines.
- minutes of use

2. Per Line Charges

Under this approach, CCL and RIC charges would be replaced by a flat-rate charge per line assessed on each interexchange carrier for each line presubscribed to the interexchange carrier. The per line charge would be calculated by dividing the sum of CCL and RIC revenues by the number of projected end user access lines. A recurring charge would then be established and applied to Interexchange carriers for each line presubscribed to the interexchange carrier. The charge would be adjusted each year as a result of price cap index changes. However, no further adjustments are necessary since the amount an interexchange carrier is charged is directly related to the lines presubscribed to the interexchange carrier.

*   *

Low-Income Consumers

7 | <u>Should the new univers i service fund provide support for the Lifeline and Linkup</u>
<u>programs, in order to n ike those subsidies technologically and competitively neutral? If</u>
<u>so, should the amount (the lifeline subsidy still be tied, as it is now, to the amount of the</u>
<u>subscriber line charge?</u>

BellSouth has supporte including a low income support element as part of the new

universal service fund In orde to implement the new program as simply as possible. the Lifeline

subsidy should continue to be i ed to the amount of the subscriber line charge That way. if the

Joint Board decides to implem it modest SLC increases on i gradual basis. low income

consumers will see no increase n the amount they pay for the SLC component of service

*   *

Administration of Universal Service Support

72   <u>Section 254(d) of the 1 '96 Act provides that the Commission may exempt carriers from</u>
<u>contributing to the supj ort of universal service if their contribution would be "de</u>
<u>minimis." The confere: ce report indicates that "[t]he conferees intend that this authority</u>
<u>would only be used in (ises where the administrative cost of collecting contributions from</u>
<u>a carrier or carriers wo ld exceed the contribution that carrier would otherwise have to</u>
<u>make under the formul. for contributions selected by the Commission." What levels of</u>
<u>administrative costs sh(uld be expected per carrier under the various methods that have</u>
<u>been proposed for func ng (e.g., gross revenues, revenues net of payments to other</u>
<u>carriers, retail revenue: etc.)"</u>

BellSouth has no detail 'd data regarding administrative costs for each of the options

listed. Intuitively, it would apι ear to be less administratively burdensome (and hence less costly)

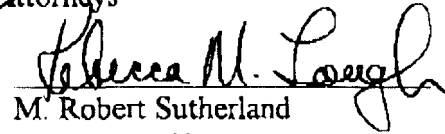to calculate each company's a: sessment under a retail revenue approach as opposed to a value

added tax approach. The use of gross revenues would also be administratively simple, but it

would suffer from the flaw of assessing access revenues twice.

Respectfully submitted,

BELLSOUTH CORPORATION and
BELLSOUTH TELECOMMUNICATIONS, INC.

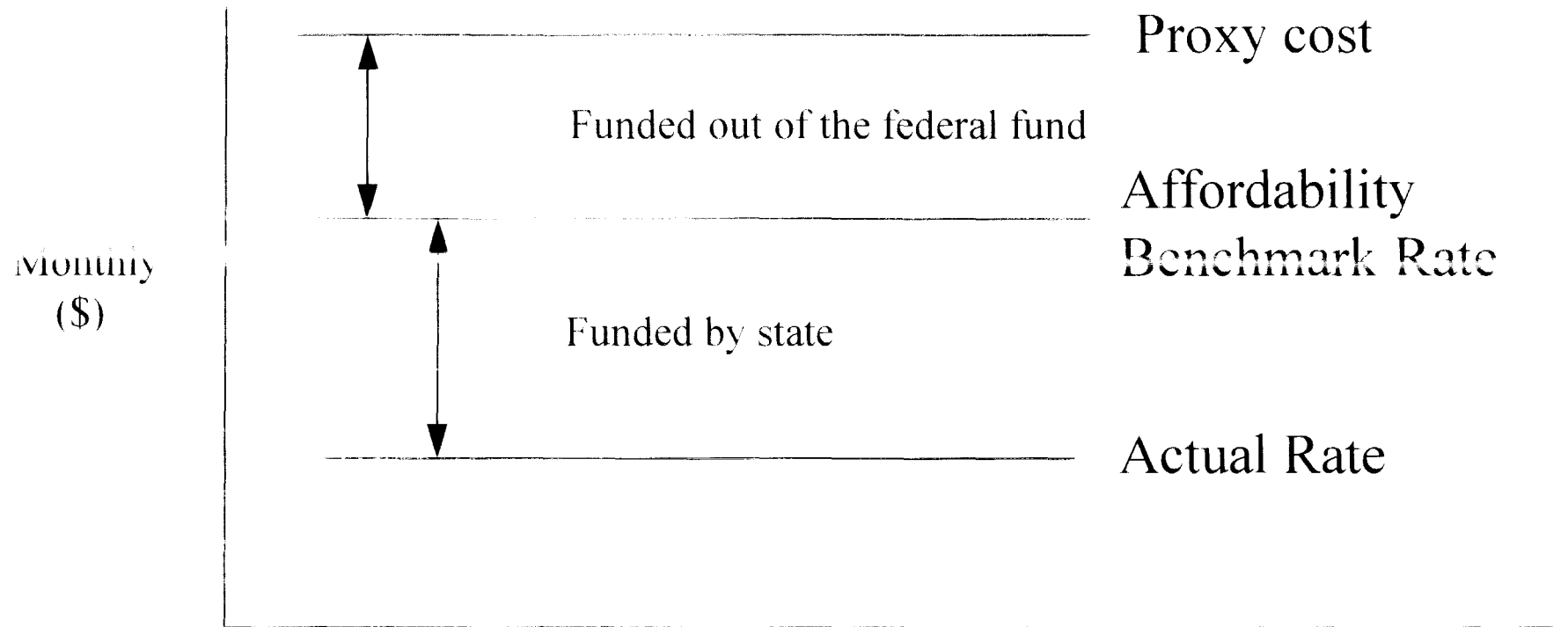Their Attorneys

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DATE: August 2, 1996

APPENDIX 1

Example A

Proxy cost

Funded out of the federal fund

Affordability
Benchmark Rate

Funded by state

Actual Rate

Monthly
($)

Example A:

In this scenario, funding is provided out of the federal universal service fund for the difference between the proxy cost and the affordability benchmark rate. The state is responsible for funding the difference between the affordability benchmark rate and the actual rate. It should accomplish this by establishing an intrastate universal service fund.
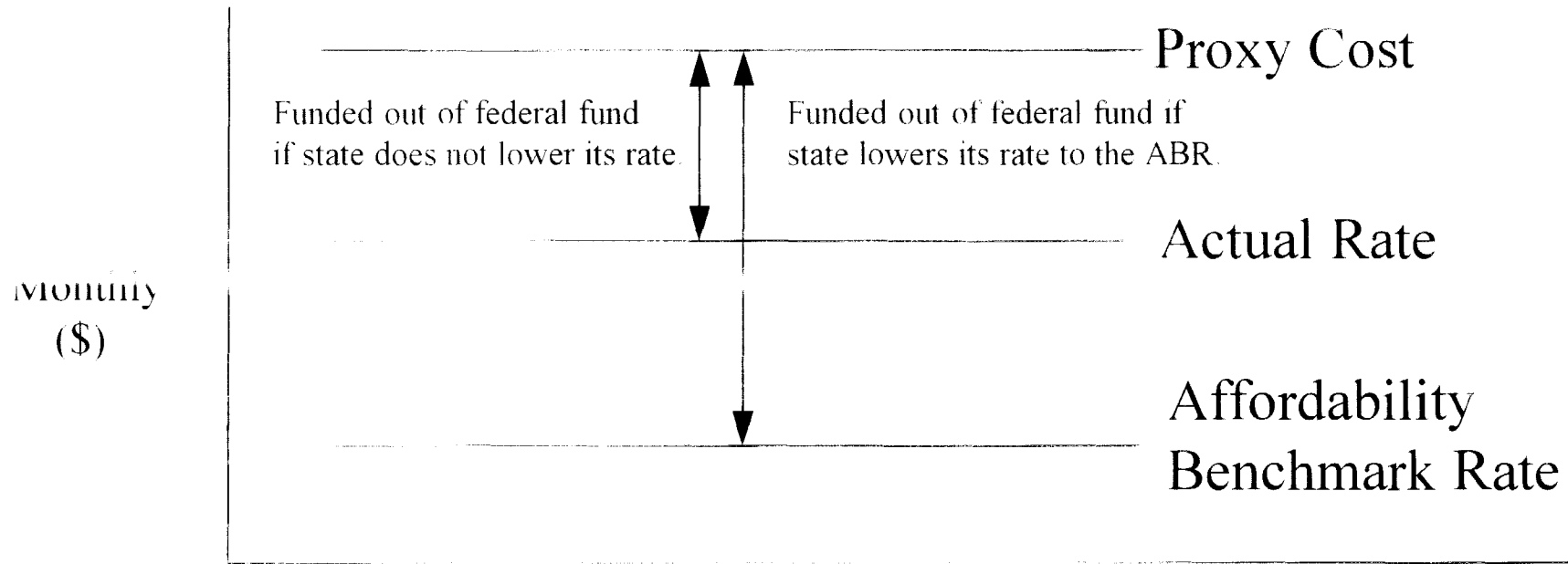
Example B

(No federal funding required)

Affordability
Benchmark Rate

Proxy Cost

Monthly
($)

Funded by state

Actual Rate
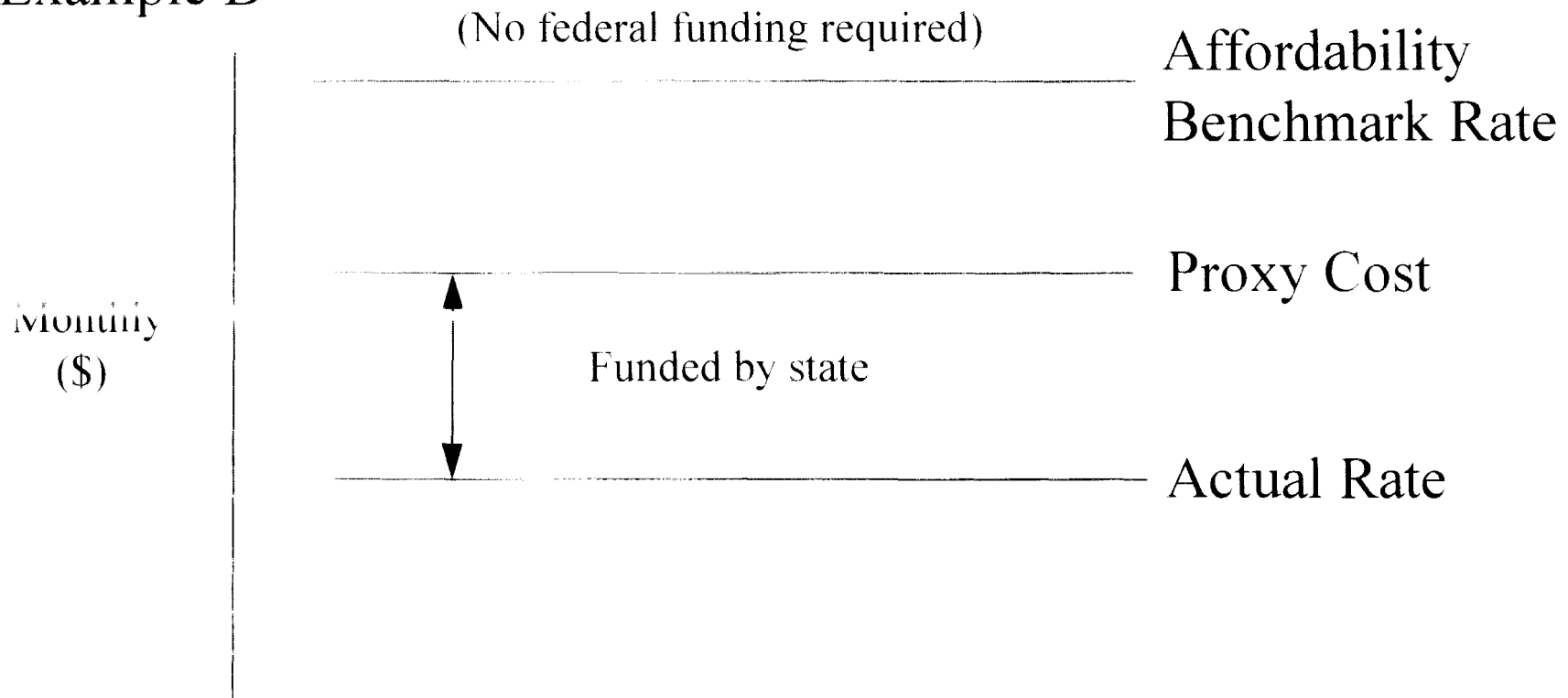
Example B:

    In this scenario, the affordability benchmark rate is above the proxy cost.
Therefore, no funding out of the federal support mechanism is required. The state is
responsible for funding the difference between the cost generated by the proxy model
and the actual rate. This should be accomplished via an intrastate universal service
fund.

Example C

Funded out of federal fund if state does not lower its rate.

Funded out of federal fund if state lowers its rate to the ABR.

Proxy Cost

Actual Rate

Affordability Benchmark Rate

Monthly ($)

Example C:

In this scenario, which will probably be rare, the state has a rate that is actually above the affordability benchmark rate (ABR). The state should then have a choice. It can lower its rate to the affordability benchmark rate and receive federal support for the difference between the proxy cost and the affordability benchmark rate. Or, it can leave local rates where they are and receive federal support for the difference between the actual rate and the proxy cost. The state may choose this latter alternative if it believes local conditions justify a rate higher than is produced by the affordability benchmark rate calculations (which do not take into account local conditions). Under either approach, there would be no need for intrastate universal service support.

Example D

Monthly
($)

Affordability Benchmark Rate

(No federal support required.)

Actual Rate
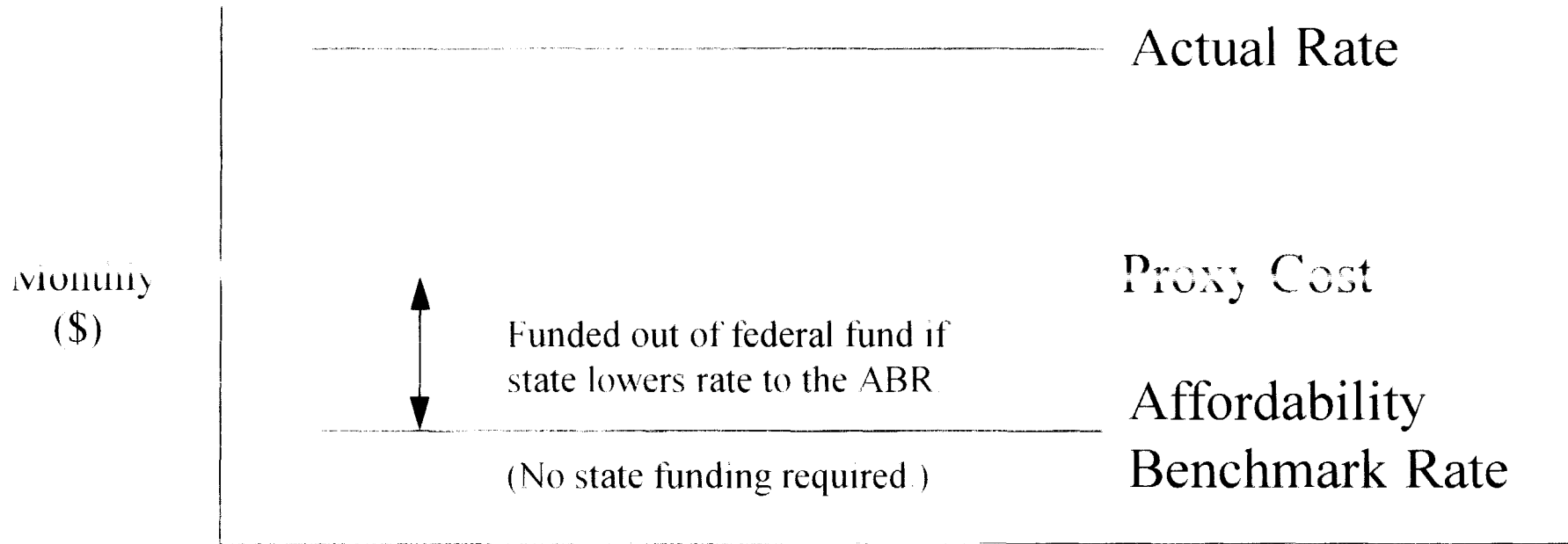
(No state support required.)
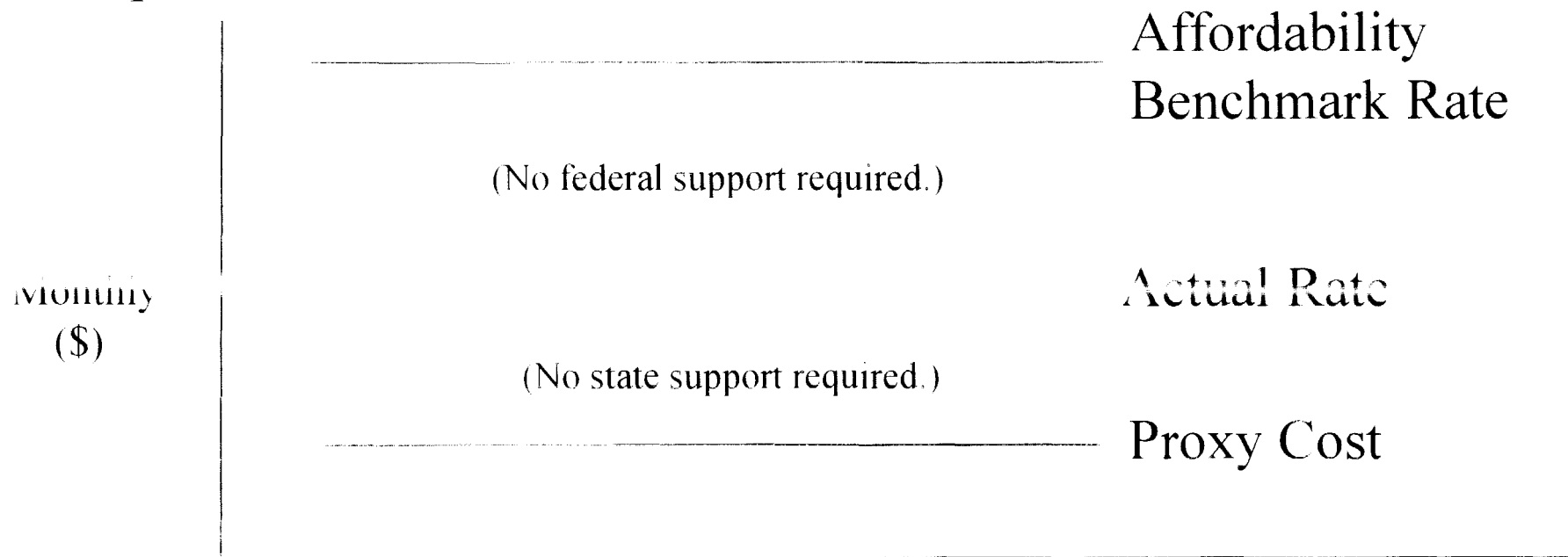
Proxy Cost

Example D:

In this scenario, the proxy cost is below both the affordability benchmark rate and the actual rate. As such, no universal service support is required out of the federal fund or the state fund.

If the proxy cost is truly indicative of actual costs, then competition will drive down the actual rate towards the proxy cost.

Note: The above outcome would also occur when the actual rate is higher than the affordability benchmark rate, and both are higher than the proxy cost.

Example E

Actual Rate

Monthly
($)

↑
↓

Funded out of federal fund if
state lowers rate to the ABR

(No state funding required.)

Proxy Cost

Affordability
Benchmark Rate

Example E:
    In this scenario, the actual rate is above both the proxy cost and the affordability benchmark rate. If the state chooses to do so, it could lower its rate to the affordability benchmark rate (ABR) and receive support out of the federal fund for the difference between the proxy cost and the ABR. Or, it could leave rates where they are and receive no federal support. As in example D, if the proxy cost is truly indicative of actual costs, then competition will drive down the actual rate towards the proxy cost.

In any event, there is no need for an intrastate fund in this scenario.

CERTIFICATE OF SERVICE

I hereby certify that I have this 2nd day of August, 1996 served all parties to this action with a copy of the foregoing FURTHER COMMENTS by placing a true and correct copy of the same in the United States Mail, postage prepaid, addressed to the parties on the attached service list.

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